



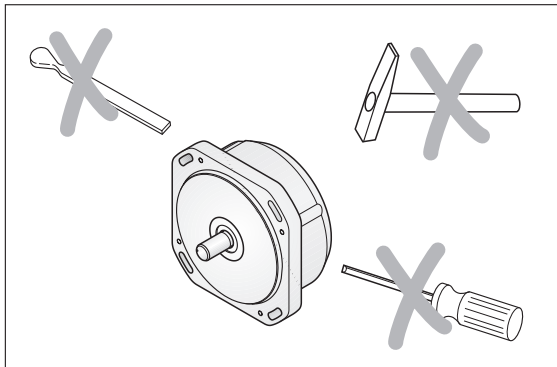
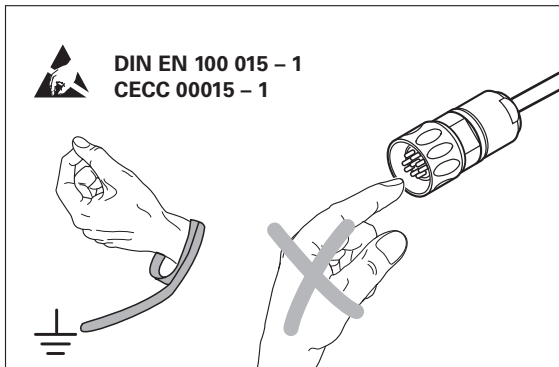
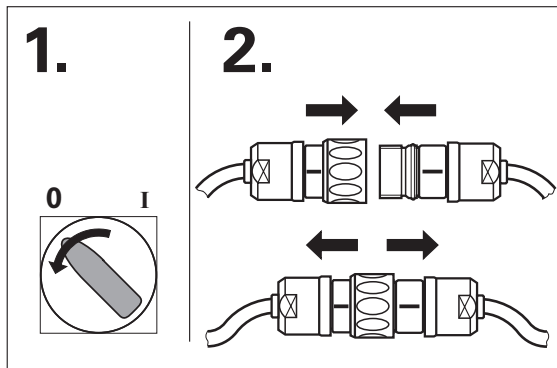
# HEIDENHAIN

Montageanleitung  
*Mounting Instructions*  
Instructions de montage  
*Istruzioni di montaggio*  
Instrucciones de montaje

## ROD 280

5/2006







Der direkte Kontakt von Flüssigkeiten mit Messgerät und Steckverbinder ist zu vermeiden!

*Avoid direct contact of fluids with the encoder and connector!*

Eviter le contact direct de liquides sur le système de mesure et le connecteur!

*Evitare che lo strumento di misura e il connettore vengano a contatto con liquidi*

¡Evitar el contacto directo de líquidos con el sistema de medida y el conector!



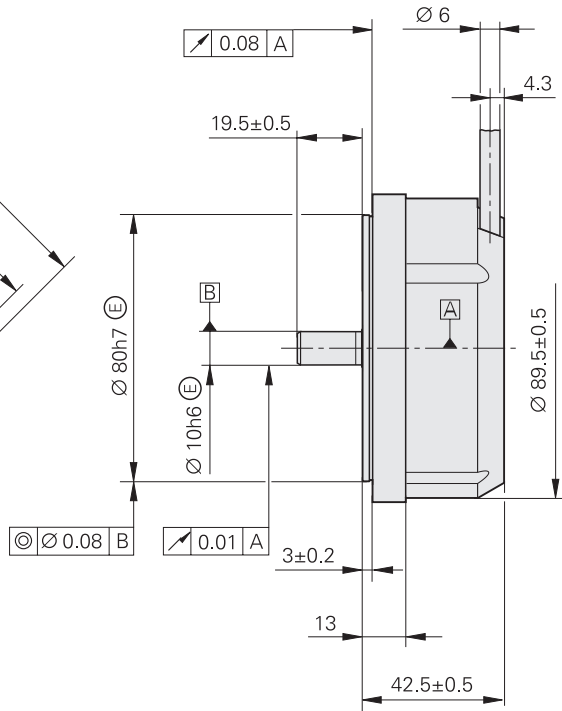
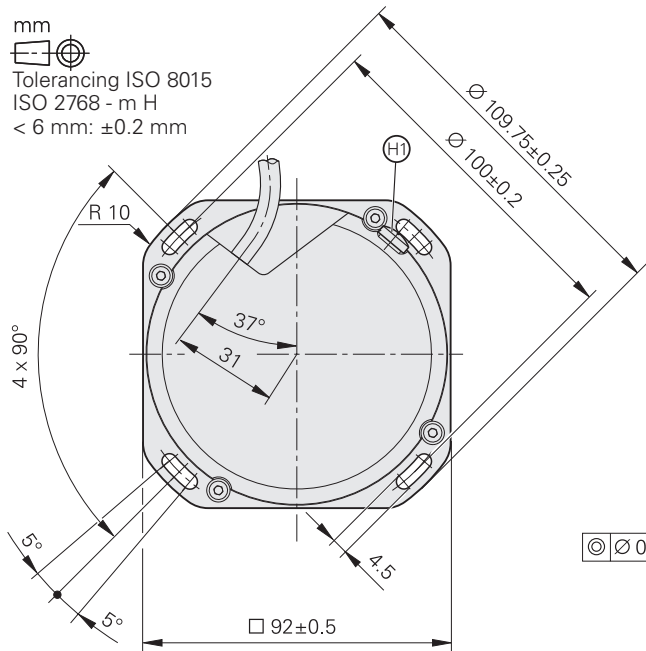
mm



Tolerancing ISO 8015

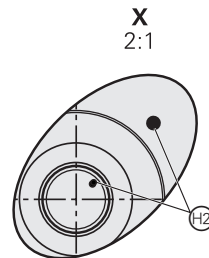
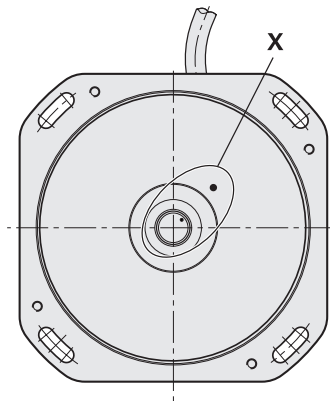
ISO 2768 - m H

< 6 mm:  $\pm 0.2$  mm



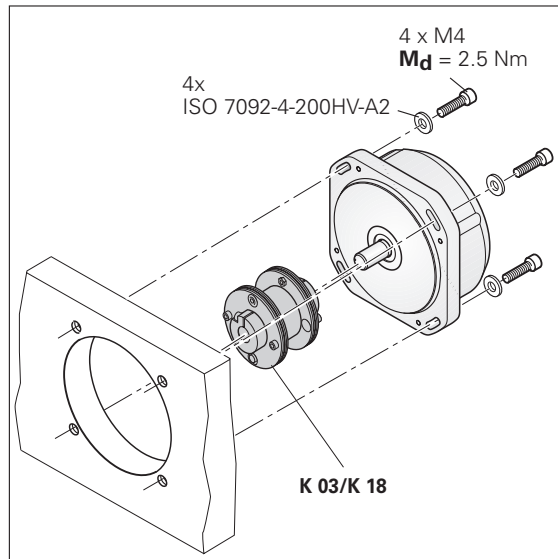
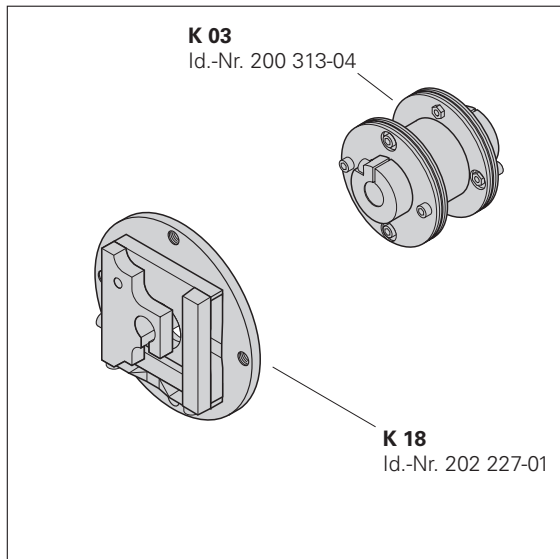
Ⓐ = Lagerung  
Bearing  
Roulement  
Cuscinetto  
Rodamiento

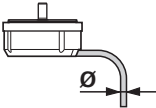


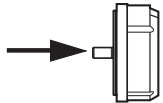


Ⓗ1 = Druckluftanschluss M5  
Compressed air connection M5  
Raccordement d'air comprimé M5  
Connessione aria-compressa M5  
Conexión de aire comprimido M5

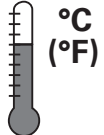
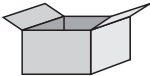
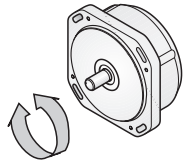


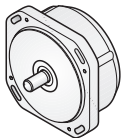
Ⓗ2 = Lage der Referenzmarke: 1 Referenzmarke  $\pm 10^\circ$ , 36 Referenzmarken  $\pm 5^\circ$   
Position of the reference mark: 1 reference mark  $\pm 10^\circ$ , 36 reference marks  $\pm 5^\circ$   
Position marque de référence: 1 marque de référence  $\pm 10^\circ$ , 36 marques de référence:  $\pm 5^\circ$   
Posizione dell'indice di riferimento: 1 indice di riferimento  $\pm 10^\circ$ , 36 indici di riferimento  $\pm 5^\circ$   
Posición de la marca de referencia: 1 marca de referencia  $\pm 10^\circ$ , 36 marcas de referencia  $\pm 5^\circ$

	<p><b>K 03:</b> <math>\lambda \leq 0.3 \text{ mm}</math></p> <p><b>K 03:</b> <math>\alpha \leq 0.5^\circ</math></p> <p><b>K 03:</b> <math>\delta \leq 0.2 \text{ mm}</math></p>	<p><b>K 18:</b> <math>\lambda \leq 0.3 \text{ mm}</math></p> <p><b>K 18:</b> <math>\alpha \leq 0.5^\circ</math></p> <p><b>K 18:</b> <math>\delta \leq 0.2 \text{ mm}</math></p>
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	 <p><math>T \geq -40\text{ °C}</math> (40 °F)</p>	 <p><math>T \geq -10\text{ °C}</math> (14 °F)</p>	 <p>max. <b>10 N</b></p>
<p><b>Ø 6 mm</b></p>	<p><math>R_1 \geq 20\text{ mm}</math></p>	<p><math>R_2 \geq 75\text{ mm}</math></p>	 <p>max. <b>10 N</b></p>
<p><b>Ø 8 mm</b></p> 	<p><math>R_1 \geq 40\text{ mm}</math></p>	<p><math>R_2 \geq 100\text{ mm}</math></p>	

	 <p>-30 ... 80 °C (-22 ... 176 °F)</p>	 <p><b><math>M_d \leq 0.01\text{ Nm}</math></b> (20 °C) <b><math>I = 20 \cdot 10^{-6}\text{ kgm}^2</math></b></p>	
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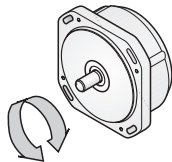


**U<sub>p</sub> = 5 V ± 10 %**  
(max. 150 mA)



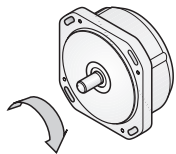
EN 50 178/4.98; 5.2.9.5  
IEC 364-4-41: 1992; 411(PELV/SELV)

(siehe, see, voir, vedi, véase  
HEIDENHAIN D 231 929)

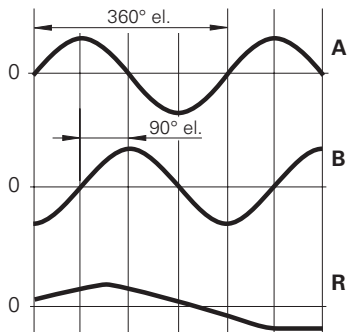
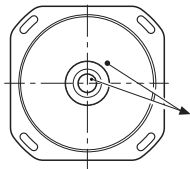


Z = Strichzahl  
*Line count*  
Nombre de traits  
*Numero di impulsi*  
Número de impulsos

$$n \leq \begin{cases} \frac{180}{Z} \cdot 10^3 \cdot 60 \text{ min}^{-1} \text{ (-3dB)} \\ 10\,000 \text{ min}^{-1} \end{cases}$$



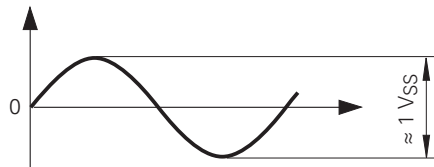
**A, B, R**



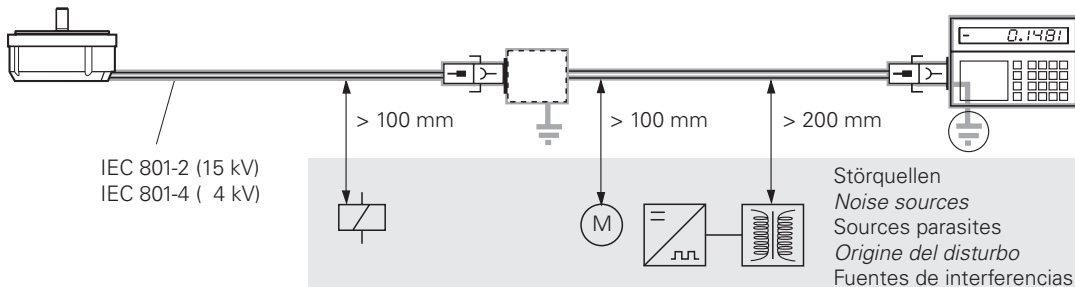
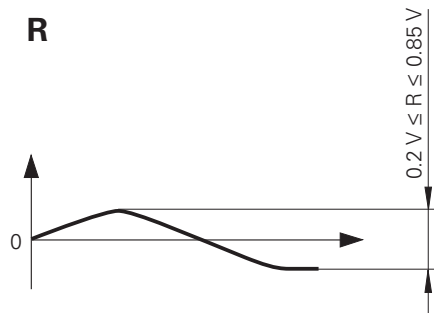
**ROD 280:** 1xR  
**ROD 280C:** 36xR

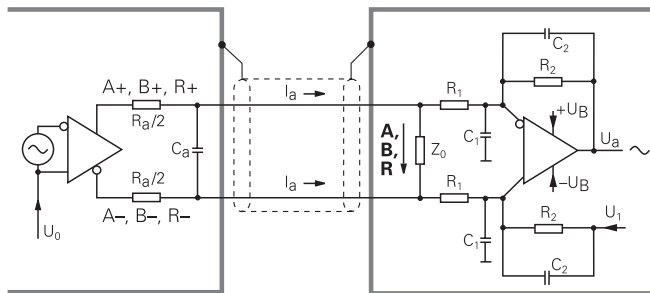
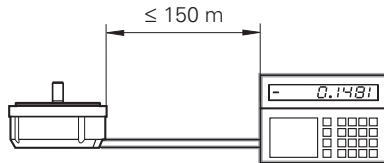


**A, B**



**R**



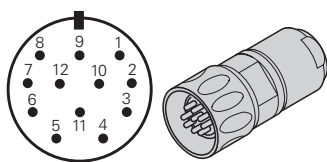


$R_a < 100 \Omega$   
 $C_a < 50 \text{ pF}$   
 $\Sigma I_a < 1 \text{ mA}$   
 $U_0 = 2.5 \text{ V} \pm 0.5 \text{ V}$

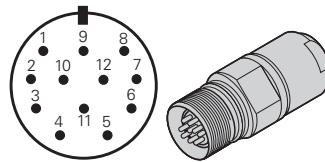
$Z_0 = 120 \Omega$   
 $U_1 \approx U_0$   
 $R_1 = 10 \text{ k}\Omega, C_1 = 100 \text{ pF}$   
 $R_2 = 34.8 \text{ k}\Omega, C_2 = 10 \text{ pF}$



02S12-03



03S12-03



<b>12</b>	<b>2</b>	<b>10</b>	<b>11</b>	<b>5</b>	<b>6</b>	<b>8</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>7</b>	<b>/</b>	<b>9</b>
<b>5 V</b> ●	<b>Sensor</b> Up ●	<b>0 V</b> ●	<b>Sensor</b> 0 V ●	<b>A+</b>	<b>A-</b>	<b>B+</b>	<b>B-</b>	<b>R+</b>	<b>R-</b>	<b>/</b>	<b>/</b>	<b>/</b>
brgn BN/GN	bl BL	wsgn WH/GN	ws WH	br BN	gn GN	gr GY	rs PK	rt RD	sw BK	vio VI	ge YL	/

Die Sensorleitung ist intern mit der Versorgungsleitung verbunden.

*The sensor line is connected internally with the power supply.*

La ligne de palpeur est reliée de manière interne à la ligne d'alimentation.

*La linea del sensore è collegata internamente con la linea di alimentazione.*

La línea de sensor está unida internamente con la línea de alimentación.

Schild auf Gehäuse

*Shield on housing*

Blindage sur boîtier

*Schermo sulla carcassa*

Blindaje a carcasa

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